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ABSTRACT

Research was conducted to investigate the effects of contextual information on the speed and accuracy with which two general classes of inferences were verified by readers. These types of inferences were based on information in conversations that were or were not topically ambiguous, depending upon the amount of available contextual information. Subjects were 68 undergraduate students who listened to eight dialogues, summarized the content of each dialogue, and responded to test statements about information from each. When the subjects' response latencies were measured, the results indicated that, for inferences/responses related to the contextual information, those that were compatible with the context took less time to verify and were rated truer than those that were not compatible with the context. An explanation based on script comprehension was proposed for these results. For those inferences/responses not related to the context, both true and false types based on implied information were rated closer to "indeterminate" in truth values and took longer to verify than those based on explicit information. This finding was consistent with results from sentence-memory and prose-processing literature. (RL)

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Contextual Information and Verifying Inferences from Conversations

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Recent work in cognitive psychology views language comprehension as an emergent process resulting from the interaction of the linguistic input with the knowledge brought to the task by the comprehender. Numerous experiments have demonstrated the importance of the comprehender's knowledge in serving as a framework around which incoming information is organized and interpreted. For example, Bransford & Johnson (1973) showed that when subjects are presented with contextual information before reading an otherwise obscure sentence or passage, more idea units were recalled and ratings of comprehensibility were higher than if no such information was given.

The comprehender's knowledge may predispose him or her to naturally and unavoidably draw certain inferences from the linguistic input (cf., Brewer, 1977; Harris & Monaco, 1978). For example, one might draw the inference that the hungry python ate the mouse after having heard "The hungry python caught the mouse". This pragmatic inference is consistent with world knowledge (we expect pythons to eat mice, given the opportunity), but is not logically necessary (a python could conceivably catch a mouse without necessarily eating it). Nevertheless, pragmatic inferences are often indistinguishable from the semantic units of the linguistic input, having been stored along with them during encoding (cf. Hildyard & Olson, 1978). In contrast, a propositional inference is a logical inference that necessarily follows from its implication. One example would be drawing the inference that Mary is shorter than Kathy after hearing "Kathy is taller than Mary".

The present research investigated the effects of contextual information on the speed and accuracy with which two general classes of inferences were verified. These types of inferences were based on

information in conversations which were or were not topically-ambiguous, depending upon the amount of available contextual information. Following from Schallert (1976), two-way ambiguous conversations which were understandable without any contextual information were used here to avoid the criticism that any facilitative effects of context were due to floor effects. Specifically, Dooling & Christiaansen (1977) speculated that some materials used in earlier research by Bransford and his colleagues were more comprehensible with a context merely because they were uninterpretable in isolation.

One of the two classes of inferences examined here, the context-dependent inferences, were related to contextual information preceding the linguistic input, while the other class, the context-independent inferences (which consisted of the propositional and pragmatic inferences described above), were not specifically related to information in the preceding context. For the context-dependent inferences, one general prediction is that receiving information compatible with the context will "set the stage" for subsequent integration of the information, thereby facilitating memory and comprehension. Conversely, inappropriate information should impede processing. Thus, responses to context-dependent inferences which are compatible with the context should be more accurate than inferences which are not compatible with the context. However, whether the latter type of inference will be verified more slowly than the former is an empirical question. Incompatible inferences could serve as bottlenecks or be rapidly rejected.

Propositional and pragmatic inferences were included in this research to gather additional information about possible processing differences when they are embedded in lengthy discourse. It was not

known whether faster latencies to verify propositional rather than pragmatic inferences would be obtained using conversational materials, as has been typically found in much sentence-memory research (e.g., Chaffin, 1979; Singer, 1976, 1977, 1979). The extended information in a conversation might well provide enough contextual support to enable pragmatic inferences to be verified without additional cognitive effort. These various inferences will be described in greater detail below.

In Experiment 1, normative ratings were collected to verify that the two alternative interpretations of the topically-ambiguous conversations were equally likely. In Experiment 2, the main experiment, subjects first listened to a given dialogue, which was either preceded or not preceded by disambiguating contextual information, then rated the truth values of statements of the classes of inferences mentioned above.

Experiment 1: Normative Ratings

Experiment 1 collected normative data for eight conversational dialogues written to be ambiguous with respect to interpretation of topic. To determine the relative salience of alternative interpretations, a two-alternative forced-choice procedure used by MacKay (1973) to rate lexically ambiguous sentences was also used here.

Subjects. Thirty-two undergraduate psychology students at Kansas State University served as subjects. All were native English speakers and received course credit for participation. Subjects were run in two large group sessions ranging from 30 to 45 minutes each.

Materials. Eight dialogue sets were written, with each one consisting of two contexts and an ambiguous "base" dialogue, as shown for

the example in Table 1. Each context preceding the base resulted in

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Insert Table 1 about here

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alternative interpretations of the dialogue topic. The following themes comprise the alternative interpretations: astronaut's first trip to the moon or helicopter policeman's experience at a political demonstration; buying a waterbed or a car; first day on the job for a beautician or a stagehand; cultivating plants or raising children; gossip about a teacher or a student; a doctor diagnosing a patient or a doctor and an intern conferring; buying a dress or observing a new art exhibition; hunting with a bow and arrow or playing the violin.

For a given ambiguous base, its two contexts were roughly matched on number of words, but precisely matched on number of turns (the point at which a given speaker has the floor during a conversation). The difference in words between contexts for a given base ranged from 0 to 5 ($\underline{M}$=2.88), and the number of turns for a given pair of contexts was identical, ranging from 1 to 5 across all dialogue sets ($\underline{M}$=1.87). For all ambiguous bases, the number of turns ranged from 8 to 14 ($\underline{M}$=11.12) and the number of words ranged from 110 to 203 ($\underline{M}$=132.38).

All ambiguous bases and contexts were tape recorded by a male and female speaker, who played the roles of the two speakers in each dialogue. Both actors read the dialogues in their natural midwestern U.S. accents as if they were actually carrying on a conversation. Although each dialogue set consisted of an ambiguous base dialogue and a context, subjects in Experiment 1 heard only the ambiguous bases.

Procedure. Subjects were told that they were participating in an experiment about how people process information in conversations; they then heard the following instructions.

> You will be hearing a series of dialogues which are ambiguous; what the two people are talking about can be interpreted in more than one way. After each dialogue has been played, the experimenter will signal you to turn the page. You will find two alternative interpretations of the dialogue topic on the page.

Next, subjects were told that after hearing each dialogue they would indicate the likelihood of each alternative interpretation by using percentages ranging from 0 to 100. For example, equally likely interretations were both given ratings of 50%. Similarly, if one interpretation was much more likely than the other, the former might be given a rating of 90% and the latter 10%.

After hearing the first dialogue shown the Table 1, subjects indicated likelihoods for "astronaut talking about blast-off to the moon" or "policeman talking about political protest he saw from helicopter", the two alternative interpretations of the dialogue topic. This same procedure was followed for each one of the seven remaining ambiguous base dialogues.

Results and Discussion

As shown in Table 2, the majority of the eight dialogues showed likelihood ratings in the 60-40 range for the two alternative interpretations.

Insert Table 2 about here

Of course, these alternative interpretations would have received equal subjective likelihood ratings if the dialogue alternatives had been maximally ambiguous. In conclusion, the normative ratings in Table 2 suggest that the alternative contexts can induce different interpretations of the same ambiguous base.

Experiment 2: Contextual Information and Understanding Conversation

Experiment 2 investigated the processing of two classes of inferences from the conversational materials used in Experiment 1. These were context-dependent (consisting of compatible and incompatible inferences), and context-independent inferences. As will be made clearer below, these classes of inferences were based on the relationship between the content of the inference and the interpretation induced by the contexts. As in Experiment 1, subjects listened to each of the eight dialogues, but in a manipulation of contextual information, these were presented with or without one of the two contexts. After hearing each dialogue, subjects judged the truth values of the series of inference statements. Latencies to verify these truth value responses were measured.

Method

Subjects. Sixty-eight undergraduate psychology students at Kansas State University who had not participated in the previous experiment were run individually in sessions lasting from 45 to 60 minutes. All subjects were native English speakers with no hearing defects and received course credit for participation.

Materials. What follows is a discussion of the various inference statements with test statements from the "astronaut-policeman" dialogue (based on materials in Bransford & Johnson, 1973) to show how they were

constructed. Context-independent inferences, whose description follows, were based solely on information in the ambiguous bases and not the contexts. For each dialogue, four test statements were written for each of the inference types mentioned below. The complete set of inference test statements for the dialogue in Table 1 appears in Table 3.

Insert Table 3 about here

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a) True and false propositional inferences: A true propositional inference is essentially a paraphrase of an utterance in the dialogue, while a false propositional inference is a contradictory paraphrase.

b) True and false pragmatic inferences: A true pragmatic inference doesn't necessarily or logically follow from an utterance in the dialogue, but is nevertheless highly probable. Conversely, a false pragmatic inference is not a logical contradiction of a dialogue utterance, but is nevertheless highly improbable.

c) Context-incompatible and Context-compatible inferences: Since there were two contexts for each dialogue, a given context-dependent inference pair consisted of one item tapping information following from one alternative interpretation, and one item tapping information from the other. Four pairs of context-dependent inferences were written for each dialogue. Most pairs were balanced such that for each member of the pair, the only difference was in the wording of the critical terminal phrase appropriate to one interpretation and inappropriate to the other.

For the dialogue in Table 1, the alternative interpretations were an astronaut relating the gala events leading to his blast-off to the moon, and a helicopter policeman discussing the riot he observed from

his helicopter. The context-dependent pair comprised by the alternative bracketings of (1a) and (1b) in Table 3 corresponds to these respective former and latter interpretations. For subjects hearing the "astronaut" context with dialogue one, (1a) would be a compatible inference and (1b) would be incompatible. Conversely, (1a) would be incompatible and (1b) would be compatible after having heard the "policeman" context. Thus every context-dependent inference was compatible for half the subjects receiving either one of the alternative contexts and incompatible for the other half.

In constructing all test statements, special care was taken to avoid the use of negatives, which would have presumably complicated processing, i.e., false statements were contradictions of information in the dialogues, not true statements to which negatives had been added.

Test statements following each dialogue were randomly ordered with the constraints that no members of the same context-dependent inference pair were immediately adjacent and that no incompatible inference occurred as the first test statement. Initial pilot work showed that subjects were confused after first hearing an incompatible inference subsequent to a dialogue.

Three taped lists of the eight ambiguous dialogues combined with the contexts were dubbed from master recordings. Each taped list contained the eight dialogues in the same order. However, across the three lists, the ambiguous sequence of each dialogue occurred only once under each one of the three contextual information conditions, i.e., each was preceded by either one of the two alternative contexts, or by no context. Dialogue lines from the contexts were spliced precisely to the ambiguous dialogues so that the listener heard one continuous dialogue, not two successive sequences.

Apparatus. Test statements, which were the same for each dialogue regardless of its contextual information condition, as well as the dialogues themselves, were presented using tape-recorders. In addition, all test statements and subjects' responses to them were tape-recorded during the experiment.

To transcribe latencies, the recording of subjects' responses and the test statements was played through a speaker to a microphone connected to a Lafayette Model 6602A Voice Reaction Time Control. Immediately following the offset of an inference test statement, the experimenter triggered a switch connected to the voice key input which activated a Series D Hunter Clock Counter. The subject's subsequent vocal response stopped the clock. Verification latency was defined as the interval between the offset of the test statement and the onset of the vocal response.

Procedure. As explained to subjects, the purpose of the experiment was to understand how people process information in conversations. Subjects were told that after hearing each one of eight dialogues, they would give either a summary or a title of it, and then respond to test statements about information in it. Requiring subjects to give a summary or title presumably encouraged deep semantic processing of the dialogues and enabled subjects' interpretations of dialogue topics to be checked against a priori intended interpretations. Subjects supplied truth responses to 24 test statements (16 context-independent inferences and 4 context-dependent inference pairs). Contextual information conditions were counterbalanced across dialogues. Instructions were as follows:

> I'd like to present to you a series of eight dialogues or conversations, each of which takes place between a male

speaker and a female speaker. After you hear each dialogue, I'd like you to summarize it or give me a title for it. After that, I'll play a series of sentences about information in the dialogue you will have just summarized or given a title for.

Using the scale in front of you, please respond as quickly and accurately as you can concerning the truth of each sentence. Your truth responses will be timed, starting at the end of the sentence. Respond with 1 if the statement is definitely false based on the conversation, 2 if it is probably false, 3 if the statement is indeterminate in truth value (i.e., the conversation did not make clear whether this would be true or false and it could be either), 4 if the statement is probably true, and 5 if it is definitely true based on the conversation.

If you have absolutely no idea as to what number to respond with, say "don't know" into the microphone. If you do make a mistake in responding, fell free to correct yourself, and I'll make a note of your correction. If you speak too softly during the experiment, I'll hold up a small sign that says, "Please talk louder," since a certain voice volume is necessary to activate the timer.

In the test statements that follow each dialogue, any mention of "the man" is a reference to the male speaker and any reference to "the woman" is a reference to the female speaker. You will have ample time to respond to each sentence after you hear it. Are there any questions?

Results

Selection of subjects. Data from eight of the 68 subjects, who had made greater than eight "don't know" responses to the entire set of test statements for all eight dialogues, were excluded. Specifically, these eight subjects provided many more "don't know" responses (M=25.88), than the other sixty subjects (M=0.93). Including these eight subjects would have resulted in means based on very few data points, since neither truth responses nor latencies could be computed from "don't know" responses.

Data reduction. For each test statement, latencies were manually transcribed three times from each tape of subjects' responses after all the data had been collected, with the experimenter blind to whatever contextual information condition a given dialogue occurred under. The mean of these three latencies was the raw score which itself was averaged across all test statements of the same item type across all eight dialogues to produce final means which were submitted to analyses of variance. Truth response scores were obtained in the same way by averaging all test statements of the same item type across all eight dialogues.

Overview of analyses of variance.

Since there were two conceptually distinct classes of inference types, i.e., context-dependent and context-independent inferences, analyses on each inference type will be reported separately. Within each class of inferences, parallel analyses were performed on the two dependent measures of truth response and latency. Only the analyses of variance for the context-independent inferences included truth value as a factor. Context-dependent inferences were compatible or incompatible, and not true or false.

Analyses of context-dependent inferences. Recall that subjects were required to give a summary or title after hearing each dialogue to verify the effectiveness of the contextual manipulation as well as induce deep semantic processing of the materials. In all analyses of context-dependent inference responses in which contextual information was manipulated as a factor, approximately 16% of all subjects' responses were deleted for dialogues that had incorrect or missing interpretations. This procedure closely resembles the customary deletion of incorrect responses in traditional reaction-time tasks. An incorrect interpretation was defined as an interpretation of the dialogue not consistent with the context. Insofar as test statement verification required understanding of the dialogue, truth and latency responses to test statements from a misinterpreted dialogue had little meaning.

One important issue to consider in comparing the "no context" to either condition in which contextual information is supplied is whether the former condition is an adequate baseline. Results from subjects' interpretations of dialogue topics indicate that even with no contexts, conversations were indeed comprehensible. In fact, as shown in the third line of each row of Table 4, the large majority of the "no context" interpretations (i.e., 155 out of 160) were consistent with either of the two alternative a priori intended interpretations.

Insert Table 4 about here

To examine the effects of contextual information on responses to context-dependent inference test statements, a one-way analysis of variance was performed on mean latencies to compatible, incompatible,

and "no context" items. As hypothesized, there was a significant main effect of contextual information on both latency, F (2, 118) = 4.63, MSe = .117, $p < .025$, and truth response, F (2, 118) = 83.45, MSe = .30, $p < .0001$. Latencies increased ordinally across compatible, "no context", and incompatible levels of the contextual information factor. In addition, while compatible inferences were rated truer than incompatible inferences, the mean truth response to "no context" inferences was 3.00, the center of the 5-point scale, suggesting that subjects were using the scale appropriately. All cell means for the two dependent measures are shown in Table 5.

Insert Table 5 about here

Scheffe tests performed on these data showed that, for truth responses, compatible inferences were rated as truer than incompatible inferences ($p < .001$), which were, in turn, rated as less true than "no context" inferences ($p < .001$). Latencies to compatible inferences were significantly shorter than those to incompatible inferences ($p < .05$), but these, in turn, were not significantly longer than "no context" inferences.

Analyses of context-independent inferences. Context-independent pragmatic and propositional inferences were constructed to be understood without any contextual information. To determine if the effects of contextual information on responses to context-independent inferences were indeed negligible, as was intended, 2 x 2 x 2 completely within-subjects analyses of variance were performed on latencies and truth responses with Contextual information (context vs. no context), Inference type (pragmatic vs. propositional), and Truth value (true vs. false) as factors. Analyses were performed on responses separately averaged over

all conditions containing a context (i.e., both incompatible and compatible levels) and over all "no context" conditions. As hypothesized, there were no significant main effects of or interactions with the contextual information factor for either dependent measure.

To examine differences among context-independent inferences, a completely within-subjects 2 x 2 analysis of variance was performed on mean latencies to pragmatic and propositional inferences of both truth values collapsed over the contextual information factor. Results indicated significant main effects of Truth value, F (1, 59) = 58.90, MSe = .03, $p < .001$, Inference type, F (1, 59) = 21.90, MSe = .024, $p < .001$, and also a significant Inference type x Truth value interaction, F (1, 59) = 4.40, MSe = .02, $p < .05$. As expected, mean latencies were longer to false than true inferences, and to pragmatic than propositional inferences, as shown in Table 6. The interaction indicated that the true-false difference was greater for pragmatic than propositional inferences.

Insert Table 6 about here

A parallel analysis on truth responses revealed a significant main effect of Truth value, F (1, 50) > 100, MSe = .113, $p < .001$, but no significant main effect of Inference type, although the Inference type x Truth value interaction was highly significant, F (1, 59) = 103.09, MSe = 4.63, $p < .0001$. In general, true inferences were rated more true than false inferences, but this true-false difference was greater for propositonal than pragmatic inferences, as shown in Table 6.

Discussion

Context-independent inferences

Latency differences. Consistent with the findings of Chaffin (1979) and Singer (1976, 1977, 1979), latencies to pragmatic inferences were significantly longer than those to propositional inferences, suggesting that pragmatic inferences may require additional reconstructive processes over and above those needed for propositional inferences. Although this study wasn't designed to locate this latency difference in a particular processing stage, Singer (1979) used latency data to test whether inferences were computed at encoding or retrieval.

Truth response differences. True pragmatic inferences were rated as less true than true propositional inferences; false pragmatic inferences were rated less false than false propositional inferences. In other words, both true and false pragmatic inferences were rated closer to "indeterminate", (the theoretical logically "correct" value of a pragmatic inference), than their propositional inference counterparts.

In previous sentence-memory research (e.g., Harris, 1974, 1977), true pragmatic inferences were rated less true than true propositional inferences during an immediate test. These differences were not found during a delayed test, presumably because the stored representations in long-term memory for the inference types were equivalent, which led subjects to respond to pragmatic and propositional inferences in the same way.

Although the present research was a memory study, the time interval between the end of a given dialogue and the test statements may have been too short to effectively alter subjects' discrimination of these two inference types, leading subjects to rate pragmatic inferences closer to indeterminate than propositional ones.

Context-dependent inferences

"Scripts" and context effects. Latencies were longer to incompatible than compatible inferences, with intermediate latencies to "no context" inferences. Similarly, truth responses were highest for compatible inferences, intermediate for "no context", and lowest for incompatible inferences.

These results are consistent with a view of inference verification which derives from Bower, Black & Turner's (1979) "spread of activation" explanation for script comprehension. Script comprehension begins when the appropriate script is accessed. Specifically, memory nodes representing major components of the to-be-assessed script are first activated. In the context of this experiment, memory nodes for a given script are activated when subjects in the "contextual information" conditions hear the context, i.e., the first few lines of dialogue which induce a certain interpretation of the dialogue. Each dialogue in the present research was well-suited for script activation; each detailed a commonplace activity subjects are well-acquainted with and have readily accessible knowledge about.

Next, this beginning activation initiated by the context spreads to nearby related nodes, activating them in turn. A general result of this accumulating activation is that expected stimulus patterns are identified rapidly. Thus, compatible inference test statements, which are consistent with the expectations induced by the accessed script, were verified more rapidly than incompatible inference test statements. This latter inference statement type did not benefit from the previously accumulating activation since information in each statement type ran counter to expectations. "No context" inferences

which were neither wholly inconsistent nor wholly consistent with expectations were verified more slowly than compatible inferences. Although, in the present research, incompatible inferences were verified no more quickly than "no context" inferences, (ideally they should be slower), they were nevertheless verified more slowly than compatible inferences.

In conclusion, the present research has extended findings on memory and comprehension of inferences to conversational materials, examined the effects of contextual information on latencies to verify inferences, and proposed an explanation of such latency differences based on comprehension using scripts.

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Table 1

"Astronaut-Policeman" Dialogue Set*

Dialogue One Contexts

Astronaut Context

A: What sticks out in your mind concerning the early days of space exploration?

B: Let me tell you about my first lift-off.

Police Context

A: What was it like to have been a helicopter patrolman?

B: Let me tell you about one incident. . .

Dialogue One Ambiguous Base

B: I was watching the whole thing from about 3000 feet up. Do you smoke?

A: All I have are Menthols. . .

B: That's fine. . . The view was breathtaking--from the window everything looked extremely small from a distance.

A: What was the crowd like?

B: At first there was a great deal of activity. Everybody was jumping up and down! One guy with a portable TV camera was getting too close. You'll never believe how those streets were littered. . .

A: When did things quiet down?

B: After plainclothesmen had to hold the crowd back, some of whom must have had tears in their eyes. Soon afterwards, the speeches started.

A: Did the speeches stir up the crowd again?

B: No, I think they were boring; everyone seemed pleased when the music started. . .

A: Your outfit--were you wearing the newest version designed by the space people complete with thermal padding, glare-proof visor, and Velcro snaps?

B: Sure, do I look like the type of guy who likes to take chances?

A: When you got down to the ground--what was the atmosphere like?

B: Excluding the fact that the entire force was there, at first it was better than we had expected. . . No particular precautions had to be taken until later, when we contacted the station. . .

*A refers to the female speaker's part while B refers to the male speaker's.

Table 2

Experiment One: Mean Likelihoods
for Alternative Interpretations

	Alternative interpretations for each dialogue (N = 32)[1]
1.	Astronaut (58.75) - Policeman (41.25)
2.	Waterbed (59.18) - Car (40.82)
3.	Beauty Parlor (18.78) - Theatre (81.22)
4.	Plants (66.81) - Children (33.19)
5.	Student (67.31) - Teacher (32.69)
6.	Intern (32.97) - Patient (67.03)
7.	Fashion Boutique (73.12) - Art Gallery (26.88)
8.	Bow and Arrow (62.34) - Violin (37.66)

[1]Mean subjective likelihoods for each dialogue interpretation are to the right in parentheses.

Table 3

Inference Type Test Statements*

Context-independent inferences

True Propositional

Plainsclothesmen attempted to restore order.
The woman had menthol cigarettes.
The man was 3000 feet up in the air.
The crowd was pleased when the music started.

True Pragmatic

The man smoked a menthol cigarette.
The crowd was bored by the speeches.
The man didn't like to take chances.
The streets were congested with litter.

False Propositional

The man thought the speeches were exciting.
The National Guard had to hold the crowd back.
The man's outfit was old.
Only some of the force was present when the man returned.

False Pragmatic

The photographer was shooting portraits.
Neither man nor woman could light their cigarettes.
The crowd came only to hear the music.
The plainclothesman were not expecting trouble.

Context-dependent inferences

Some of the people in the crowd were crying because they were {(1a) emotionally moved / (1b) teargassed}.

The crowd was {joyously excited / angry and hostile} at first.

Some musicians played {military fanfares. / folk songs of protest.}

The man wore a {space-travel / riot-protection} suit.

* All test statements for all dialogues were recorded by the male experimenter.

Table 4

Dialogue Interpretations

Context Heard	Interpretation A	Interpretation B	A and B*	Neither*
Astronaut (A)	20	0		0
Policeman (B)	4	12		4
No context	11	2		6
Waterbed (A)	20	0		0
Car (B)	0	17		2
No context	1	3		14
Theatre (A)	20	0	0	0
Beauty Parlor (B)	0	16	0	2
No context	8	4	1	3
Plants (A)	13	1	1	4
Children (B)	1	11	6	2
No context	6	3	4	6
Student (A)	15	1		4
Teacher (B)	13	3		3
No context	9	1		9
Doctor-Patient (A)	19	0	0	0
Doctor-Intern (B)	0	20	0	0
No context	13	3	1	2
Clothing (A)	16	1	0	
Art work (B)	8	9	3	
No context	13	4	2	
Bow and Arrow (A)	19	0	0	
Violin (B)	0	19	1	
No context	18	1	1	

*Blanks indicate zero responses.

Table 5

Mean Responses to Context-Dependent Inferences

Dependent Measure	Compatible	"No Context"	Incompatible
Truth Response (1=false; 5=true)	3.664	3.002	2.733
Latency (in seconds)	1.673	1.828	1.846

Table 6

Mean Responses to Context-Independent Inferences

	True Pragmatic	False Pragmatic	True Propositional	False Propositional
Truth Response (1=false; 5=true)	3.82	2.56	4.13	2.32
Latency (in seconds)	1.714	1.925	1.659	1.792